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OWTS Policy
State Water Resources Control Board
P.O. Box 2231
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Subject: Comment Letter – DRAFT OWTS Policy Documents

Please accept these comments on the draft Water Quality Control Policy (the Policy) for Onsite Wastewater Treatment Systems, submitted by Orenco Systems, Inc. Orenco Systems is a recognized leader in the onsite wastewater treatment system industry. Our numbered comments and recommendations are as follows.

1) **Better define acceptable alternative third party testing agencies to verify advanced treatment system nitrogen reducing capabilities.**

   Section 10.7.1 requires that nitrogen reducing advanced treatment systems be "certified by NSF, or other approved third party tester" to meet a 50% total nitrogen reduction requirement. The Policy does not distinguish between testing of a single treatment unit under idealized laboratory conditions (such as NSF/ANSI Standard 245), versus testing multiple systems installed at actual residences ("field-testing"). It is widely recognized that field-testing can be a more reliable indicator of real-world performance, because the tested systems are subject to the demands of actual residential use, and the influent wastewater is actual domestic strength wastewater that typically contains 60 to 70 mg/L total nitrogen (by contrast, the influent water supplied for NSF/ANSI Standard 245 may contain as little as 35 mg/L total nitrogen).

   The Policy needs to better define the types of third party testing programs and verification agencies that might be considered acceptable for complying with Section 10.7.1. The Policy should state that the State Water Board may accept field-testing results provided that samples are collected by an independent third party and results are verified by a recognized verification agency such as an academic institution, non-profit verification institution such as NSF International, or a California or other state government agency).

   For example, the state of Maryland Department of the Environment (MDE) has a Best Available Technology testing program for the Chesapeake Bay Restoration Fund, to help achieve the TMDL adopted for the Bay. Maryland's BAT testing program serves as an excellent model for testing the performance of nitrogen-reducing advanced wastewater treatment systems. See the MDE's BAT program website at http://www.mde.state.md.us/programs/Water/BayRestorationFund/OnsiteDisposalSystems/Pages/Water/cbwrf/osds/brf_bat.aspx.

2) **Establish minimum inspection frequencies, and inspection reporting requirements for nitrogen reducing advanced treatment systems.**

To assure effective long-term performance of advanced treatment systems, it is absolutely critical that the Policy include minimum inspection frequency and inspection reporting requirements.

The most effective way to ensure that advanced treatment systems are properly inspected and maintained is for regulatory agencies to require that the owner or service provider submit regular inspection reports in a defined format. Web-based, user-funded Operation & Maintenance tools are now available, making it possible for the State Water Board or local regulatory agencies to collect and manage those reports at virtually no cost and with little personnel resources required. Service providers are more likely to show due diligence when they realize that they are responsible for submitting inspection reports to regulatory agencies. Regulatory agencies can readily identify non-compliant sites by generating reports using a few keystrokes on a computer, and automatically generate notices requiring corrective action as necessary.

Experience shows that regulatory programs for onsite wastewater treatment systems are usually ineffective unless backed up by a solid commitment by regulatory agencies to track operation and maintenance. The Policy establishes performance-testing requirements for nitrogen reducing technologies, *but establishes virtually no requirements that will assure that systems continue operating to effectively remove nitrogen once they have been installed in the ground.* Technology performance verification is obviously an important first step, but it represents best-case performance—it is certainly not sufficient to assure effective ongoing operation.

To assure ongoing performance, it is necessary to go beyond merely the initial step of up-front technology performance appraisal. If the State Water Board is truly serious about controlling nitrogen discharges from OWTS in nitrogen sensitive areas, then that goal must be backed up with a firm agency *commitment* to tracking the O&M and performance of these systems. Otherwise, the State Water Board's resolve may be in doubt.

It would not be justifiable for the State Water Board to adopt regulations requiring that owners install high-performing advanced treatment systems, and then walk away from any regulatory commitment to tracking and enforcing the ongoing proper operation and maintenance and performance of those systems.

3) **Establish minimum service provider qualifications for sites that require advanced treatment.**

Advanced treatment systems are not toys. They are not passively operated. They are complex devices that rely on physical, mechanical, and biological processes. They require skilled technicians—servicing them is beyond the capabilities of the typical homeowner. The Policy should be revised to require that if a homeowner chooses to act as his/her own service provider, they must meet certain specific minimum training requirements.

4) **Allow Local Agencies to Adopt Less Restrictive Dwelling Density Requirements for Tier 1 OWTS.**

Section 7.8 restricts the dwelling density for new subdivisions implemented under Tier 1 to one dwelling unit per 2.5 acres for those units that rely on OWTS. That restriction may be needlessly conservative in some cases. We urge the State Water Board to consider allowing local agencies to establish less restrictive dwelling density requirements through an approved Tier 2 Local Agency Management Program.

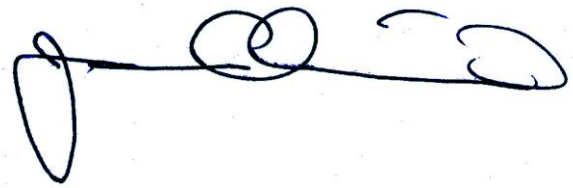
Pursuant to Section 8.1.4, the Policy would allow local agencies discretion to establish less restrictive requirements for minimum soil depth than required for Tier 1 systems. We urge the State Water Board to similarly allow local agencies discretion to establish less restrictive dwelling density requirements with justification.

5) **For advanced treatment systems, the Policy should be specific about what conditions must trigger an alarm.**

   Section 10.12 requires that advanced treatment systems be equipped with sensors and alarms to notify users in the event of an alarm condition. The Policy should be more specific about what alarm conditions, at a minimum, the system must be capable of detecting (for example, high water level alarm, pump failure alarm, etc.). For suspended growth aerobic treatment units that rely on active aeration, the Policy should require that the unit be equipped with a sensor and alarm to notify the user if the air pressure is outside the acceptable range, or if the air compressor motor has been switched off.

Thanks for the opportunity to comment on the draft Policy for Onsite Wastewater Treatment Systems.

Sincerely,



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